

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008962**Date Inspected:** 19-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Yumin and Li Jia**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as OBG 1E punch list items 1596 and 1603. The weld designations reviewed are as follows:

**Punch List Items**

1. #1610: SSD34-PP8.5-154

2. #6011: BP306-001-034

1AW

SMAW welding of weld joint 007 located on SSD34-PP8.5.

Welder is identified as Mr. Zhao Pan (220063). ZPMC QC is identified as Xu Yumin.

The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-U5-F and repair procedure WR-B7487.

**NDT Observation**

This QA Inspector observed ZPMC Magnetic Particle (MT) Technician performing MT on various locations in the trial assembly yard. Locations are as followed:

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

1. Repair areas (UT Rejects) at 1AAE & 1AE weld joint OBE1-001 bottom plate.
2. Repair areas (UT Rejects) at 1AAW & 1AW weld joint OBE1-001 deck plate.

This QA Inspector observed ZPMC Ultra Sonic (UT) Technician performing UT on various locations in the trial assembly yard. Locations are as followed:

1. UT was performed on weld OBW1-009 (counter weight side) with a 45° wedge. Scanning “D” pattern was observed at time of UT inspection.

### Miscellaneous Work In Progress

QA Inspector observed ZPMC’s personnel performing various job functions in the trial assembly yard. Locations and description of work are as followed:

1. Repair work (UT Reject excavations) in progress on weld OBW1A-003, per B-WR7652 procedure.
2. Repair work (UT Reject excavations) in progress on weld OBW1-001.

### 1AAW & 1AW

This QA Inspector performed random MT inspection at repair work at weld OBE1-001 (UT reject excavations). During the course of MT inspection, this QA Inspector observed various transverse linear indications adjacent to excavation areas. Transverse indications measurements were taken from counter weight side edge of segment and are as followed:

1. OBW1-009: Approximately 670mm
2. OBW1-001: Approximately 2420mm (2 transverse indications at this excavation area)
3. OBW1-001: Approximately 2860mm
4. OBW1-001: Approximately 4180mm

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (134-8257-0045), who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Alaniz, Joe	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon, Albert	QA Reviewer

---